

551848

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number
WO 2004/087211 A2

(51) International Patent Classification⁷: **A61K 45/00**

(21) International Application Number:
PCT/US2004/010346

(22) International Filing Date: 1 April 2004 (01.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/458,955	1 April 2003 (01.04.2003)	US
60/470,434	15 May 2003 (15.05.2003)	US
60/540,301	28 January 2004 (28.01.2004)	US
60/544,003	12 February 2004 (12.02.2004)	US

(71) Applicant (for all designated States except US): APPLIED RESEARCH SYSTEMS ARS HOLDING N.V. [NL/NL]; Pietermaai 15, Curacao (AN).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PALMER, Stephen, S. [US/US]; 67 Main Street, Plympton, MA 02367 (US). McKENNA, Sean, D. [US/US]; 679 Lincoln Street, Duxbury, MA 02332 (US). ARKINSTALL, Stephen, J. [US/US]; 31 Marsh Street, Belmont, MA 02478 (US). ESHKOL, Aliza [CH/CH]; Chemin du Petit Molard 1, CH-1278 La Rippe (CH). MACNAMEE, Michael, C. [GB/GB]; 30 Riddy Lane, Bourn, Cambridgeshire CB3 7SP (GB).

(74) Agents: CLOUGH, David, W. et al.; Howrey Simon Arnold & White, LLP, Suite 3400, 321 N. Clark Street, Chicago, IL 60610 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/087211 A2

(54) Title: INHIBITORS OF PHOSPHODIESTERASES IN INFERTILITY

(57) Abstract: The present invention is directed to methods of increasing oocyte production in a mammal. More specifically, the specification describes methods and compositions for inducing follicular maturation using a PDE inhibitor. The inhibitor may be used alone at high doses. Alternatively, the follicular maturation is achieved by combining a low dose of FSH with the PDE inhibitor treatment.